

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Please replace the paragraph on page 2, lines 24-29 with the following:

On the other hand, since the focal depth has recently become shallow and, as a result, the process variation tolerance has been reduced, as described above, variations in the dimensions and the shapes of resist patterns are affected by variations in the thickness of resist films and films formed on a ~~substrat~~ substrate.

Please replace the paragraph on page 4, line 27 – page 5, line 1 with the following:

However, since it is difficult to control variations in the thickness and the physical properties over the entire ~~water~~ wafer surface, between wafers, or between lots, an antireflective coating is applied to under the resist film and to the uppermost layer of the substrate in order to reduce influence of the reflection from the substrate. On the projection aligner side, on the other hand, such measures as adoption of a method for controlling exposure amounts, and reduction of uneven illumination may be applied.

Please replace the paragraph on page 5, lines 16-25 with the following:

~~According one~~One aspect of the present ~~invention~~, invention is a projection aligner for projecting a mask pattern for fabrication of a semiconductor device onto a substrate to be processed. The projection aligner comprises a reflectance measuring mechanism for irradiating a substrate to be processed with exposure light and measuring a reflectance of the exposure light from the substrate to be processed, and a control mechanism for adjusting an intensity of the exposure light to a predetermined intensity by referring to the measured reflectance.

Please replace the paragraph on page 6, lines 1-4 with the following:

~~According to another~~Another aspect of the present ~~invention~~, invention is a semiconductor ~~device~~, device fabricated by use of the projection exposure method according to the methods of the present invention.

Please replace the paragraph on page 7, line 34 – page 8, line 5 with the following:

Generally, a high-pressure mercury lamp or an excimer laser is used as the exposure light source 1. Excimer lasers used for this purpose include KrF, ArF, and F2 whose ~~wavelength is~~ wavelengths are 248 nm, 193 nm, and 157 ~~nm~~ nm, respectively. However, the present invention is not limited to these specific excimer lasers.

Please replace the paragraph on page 11, lines 26-31 with the following:

Fig. 2(a) 2(b) is a schematic diagram illustrating a case in which a reflectance of the exposure adjacent area 8a is measured by use of the reflectance measuring system 100a, while Fig. 2(b) 2(a) is a schematic diagram illustrating a case in which a reflectance of the exposure adjacent area 8b is measured by use of the reflectance measuring system 100b.

Please replace the paragraph on page 12, line 28 – page 13, line 3 with the following:

Furthermore, according to the first embodiment, to average the reflectance information from the wafer 7, the optical system 10 shapes the shape of the branched incident light 17 light 19 into an elliptical ~~shape~~ shape 19 having a short diameter width of 0.5 to 2 mm and a long diameter width of 0.5 to 26 mm. However, the present invention is not limited to this specific shape. Other shapes may be used. It should be noted that the averaging of reflectance information is carried out to avoid improper setting of an exposure amount, which occurs when a singularity in the reflectance is irradiated with the incident light 17.

Please replace the paragraph on page 13, lines 9-16 with the following:

Further, even though the first embodiment assumes that the incident light 17 is incident to the wafer 7 at a right angle, the present invention is not limited to this specific arrangement. It may be arranged that the wafer 7 is irradiated with the incident light 17 at an another angle, and the reflected light 18 is introduced to the reflectance detector by use of an optical system different from that used for the incident light.